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AGRICULTURAL.

We can have no doubt that we shall both gratify and instruct many of our agricultural readers by the subjoined selection from the Code of Agriculture of Sir John Sinclair, on the subject of Soils. The treatise is not unknown among us; but to many it is not easily accessible. Every thing that came from his pen on the subject of Agriculture is of high authority and practical importance. He treats the subject in that plain, popular manner, which renders it intelligible to all readers.

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SOIL.

The surface, or outward coating of land, usually consists of various earthy matters, with a mixture of animal and vegetable substances in a state of partial decomposition, together with certain saline and mineral ingredients. Where favorably combined, it is admirably calculated to afford support to plants, to enable them to fix their roots, and gradually to derive nourishment by their tubes, from the soluble and dissolved substances contained in the *soil*, (as this mixed mass is called,) or passing into it. The strata on which it is incumbent, are known under the general name of *subsoil*.

The importance of the soil has been described in various ways. By some it has been called the mother, or nurse of vegetation. By others it is represented as discharging functions to plants, similar to those which the stomach does to animals, in preparing their food, and fitting it for absorption by their roots. It furnishes the plant also with heat; for a well cultivated, and highly manured soil, is much warmer than the surrounding atmosphere. The farmer, it is said, ought to study the relative value of the different soils, as the merchant does the worth of the several commodities he deals in. In short, a favorable *soil* and climate, are declared to be, the first riches of a country.

The importance of a farmer's paying particular attention to the nature and quality of the soil he cultivates, need not therefore be dwelt upon. By availing himself of the qualities it possesses, or by removing its defects, his profits are much increased. He must, in general, regulate his measures accordingly, in regard to the rent he is to offer, the capital he is to lay out, the stock he is to keep, the crops he is to raise, and the improvements he is to execute. Indeed such is the importance of the soil, and the necessity of adapting his system to its peculiar properties, that no general system of cultivation can be laid down, unless, all the circumstances regarding the nature, and situation of the soil and subsoil, be known; and it rarely happens if a farmer has been long accustomed to one species of soil, that he is equally successful in the management of another.

Soils may be considered under the following general heads:—Sand;—Gravel;—Clay;—Chalk;—Peat;—Alluvial; and,—Loam, or that species of artificial soil, into which the others are generally brought, by the effects of manure, in the course of long cultivation. After describing each sort, it is proposed to state, the modes of improving their texture; the crops for which they are respectively calculated; and the districts where they are cultivated with the greatest success.

1. *Sand.*—A soil that consists entirely of small grains of a hard nature, (silex,) which neither cohere together, nor are softened by water, nor soluble in acids, though it ought not to be totally abandoned, yet is too poor to be cultivated with advantage. It would indeed be hazardous in the extreme, from the risk of having the covering mould blown off the new-sown grain, in the spring, by high winds. Sandy soils, however, generally have a considerable mixture of other substances, by which their quality is greatly ameliorated.

The best mode of improving the texture of such a soil, deficient in retentive or adhesive properties, is, by a mixture of clay, marl, sea-ooze, sea-shells, peat, or vegetable earth; and it frequently happens, that under the sand itself, or in its immediate neighborhood, the very materials may be found, so essential for its improvement.

In some parts of Norfolk, they have availed themselves of these auxiliaries, for improving a sandy soil, in an eminent degree; by means of which they have created a new soil; and by the continuation of judicious management, they have given a degree of fame to the husbandry of that district, far surpassing that of others naturally more fertile.

The improvement of a sandy soil, is generally accomplished by fossil manures; but vegetable substances are likewise effectual; A top dressing of peat has been tried for that purpose, and the experiment was attended, not only with immediate good effects, but with permanent benefit.

Sandy soils are valuable, being so easily cultivated, and so well calculated for sheep, that most profitable species of stock. Where the land is hilly, rabbits are frequently kept, for the rabbit can easily throw down the light soil from the hole he excavates, where there is a declivity. Hence it has been remarked by some that *loose-soiled hills*, will pay better in rabbit-warrens, than under any other mode of occupation. Others consider planting to be a more profitable appropriation of such hills.

Rich sandy soils, however, such as those of Frodsham, in Cheshire, under a regular course of husbandry, are invaluable. They are cultivated at a moderate expense; and at all seasons, have a dry soundness, accompanied by moisture, which secures excellent crops even in the driest summers.

The crops raised on sandy soils are numerous, as the common turnip,—potatoes,—carrots,—barley,—rye,—buckwheat,—pease,—clover,—sainfoin, and other grasses. This species of soil, in general, has not strength enough for the production of Swedish turnip, beans, wheat, flax, or hemp, in any degree of perfection, without much improvement in its texture, the addition of great quantities of enriching manure, and the most skilful management.

When under a course of cultivation, it is a great advantage to sandy soils, either to fold sheep upon them, or to consume the crops of turnips upon the ground where they are raised. These practices greatly contribute to the improvement of such soils, not only by the dung and urine thus deposited, but by the consolidation and firmness of texture which the treading of the sheep occasions.

The carrot husbandry, in the "Sandlings" of Suffolk, as they are called, is one of the most interesting objects to be met with in the British agriculture. After defraying all expenses, the clear profit, by feeding horses in the stables, is considerable, (*5l. 9s. 6d.* per statute acre.) Some prefer to fatten bullocks with them; while others, who have the advantage of water-carriage, think it most beneficial to send their carrots to the London market. Carrots are likewise an admirable preparation for other crops.

In Norfolk and Suffolk, it is found that poor sandy soils, not worth *5s.* per acre for any other purpose, under sainfoin, will produce, after the first year, about two tons per acre, of excellent hay, for several years, with an after-grass, extremely valuable for weaning and keeping lambs. How much more beneficial than any crops of grain that such soils usually yield!

In the neighborhood of Dunbar in Scotland, there are some farms originally of a light sandy soil, which have been rendered uncommonly productive; but they are situated on the coast, and accommodated with immense quantities of seaweed. For many years they were cultivated in the following course of severe cropping. 1. Turnips; 2. Drilled wheat; 3. Clover; 4. Drilled wheat. By cultivation, the soil has now become a species of light loam.

The management of sandy land, according to the system adopted by the celebrated Duckett of Petersham and Esher, in Surrey, has been strongly recommended by an eminent author. It was founded on three principles: 1. Ploughing very deep: a due degree of moisture was thus preserved in his light land, by means of which his crops were flourishing in seasons of drought, which destroyed those of his neighbors;—2. Ploughing seldom, but effectually, by a trench plough, or what he called a skim-coulter plough, with which he buried the weeds that grew on the surface; he has been known to put in seven crops with only four ploughings; and, 3. Occasionally raising a crop of turnips the same season, after a crop of wheat or of pulse.

In the Pays de Waes in Flanders, sand is likewise cultivated to great perfection. The soil of that district, which was originally a barren white

sand, by a slow but sure process, has at last been converted into a most fertile loam. The surface, to the depth of three or four inches, was at first alone cultivated, but the soil was gradually deepened, as it became progressively enriched; and now the ground, at the commencement of every rotation, is trenched by a *shovel*, (the soil being very loose,) to the depth of from fifteen to eighteen inches, the exhausted surface is buried, and the fresh soil brought up, enriched by the manure washed down to it, during the seven preceding years. It is then subjected to the following course of crops: 1. Potatoes; 2. Wheat manured sown in November, and carrots in February, for a second crop in the same year; 3. Flax, manured, and sown with clover seed, for the next crop; 4. Clover; 5. Rye or wheat, with carrots for a second crop; 6. Oats after the carrots; and, 7. Buckwheat; at the end of which period the ground is again trenched.

The double crops raised in the sandy soils of Flanders, in the course of the same year, are attended with much advantage. The Flemish farmers thus obtain a greater quantity of manure, than they could produce under any other system, by which they are enabled to extract so much produce from soils, originally sterile, and which would soon revert to their former state of barrenness, without the greatest industry, and the most unwearied attention.

It is a rule, in regard to sandy soils, never to pick off any small stones that may be found in them, as they contribute to prevent evaporation, and to preserve moisture. It is another rule, frequently to renovate the strength of such soils, by laying them down with grass-seeds, and pasturing them for a few years, as they are so apt to be exhausted by aration, if corn crops are too frequently repeated.

It may be added as a general rule, that the fertility of sandy, or siliceous soils, is in proportion to the quantity of rain that falls, combined with the frequency of its recurrence. As a proof of this, in the rainy climate of Turin, the most prolific soil has from 77 to 80 per cent of silicious earth, and from nine to fourteen of calcareous; whereas in the neighborhood of Paris, where there is much less rain, the silex is only in the proportion of from 26 to 50 per cent in the most fertile parts.

2. *Gravel.*—Gravelly soils differ materially from sandy, both in their texture and modes of management. They are frequently composed of small soft stones, sometimes of flinty ones; but they often contain granite, limestone, and other rocky substances, partially, but not very minutely decomposed. Gravel, being more porous than even sand, is generally a poor, and what is called, *a hungry soil*, more especially when the parts of which it consists, are hard in substance and rounded in form. Gravelly soils are easily exhausted, for the animal and vegetable matters they contain, not being attracted by the earthy constituent parts of the soil, which are seldom sufficiently abundant for that purpose, are more liable to be decomposed by the action of the atmosphere, and carried off from them by water.

Gravelly soils are improved by draining, where they are troubled with springs;—by deep ploughing;—by mixing them with coats of clay, chalk, marl, peat, or other earth; by frequent returns of grass crops;—by repeated applications of manure;—and by irrigation, if the water be full of sediment, and judiciously applied on a proper form of surface.

Sometimes the ground is so covered with flints and stones, that hardly any mould is to be seen. Land of this description is very troublesome to work, and is injurious to the implements of husbandry employed in the cultivation; but with proper management, it can be rendered highly productive.

The *stone-brash*, or *com-brash* soils, (as they are provincially called) of Gloucestershire, and the midland counties of England, may be included under the general head of *gravelly soils*, being so much mixed with small stones. They have frequently, however, more sand, or clay, or calcareous loam, in their composition, than gravelly soils usually possess, and on that account, are treated of by some authors as a distinct species of soil.

Gravelly soils, from their parting so readily with moisture, are apt *to burn*, as it is called, in dry seasons: but in wet ones, they usually produce abundant crops of barley, rye, tares, pease, oats, and even wheat; and even a thin stratum of gravel, if mixed with shells, and other marine productions, possesses many advantages for cultivation, in a wet climate.

A gravelly soil, free from stagnant water, gives such an additional warmth to the climate, that vegetation is nearly a fortnight earlier, than where other soils predominate. About Dartford and Blackheath in Kent, such soils produce early green pease, winter tares, rye, autumnal pease, and occasionally wheat, in great perfection.—When barley and oats are cultivated, they should be sown *very early*, that they may have full possession of the ground before the dry season sets in. Gravelly soils, in a wet climate, answer well for potatoes; and indeed, in Cornwall, in a sheltered situation, with a command of sea-sand, and of seaweed, they raise two crops of potatoes in the same year.

Poor gravelly soils, full of springs, and those sulphurous, are very unfriendly to vegetation; and are better calculated for wood than for arable culture.

3. *Clay.*—A clay soil is distinguished above every other for tenacity. It feels smooth, and somewhat unctuous. If cultivated in a wet state, it sticks to the plough like mortar, and does not soon become dry. It is often, indeed, of so adhesive a nature, that it will hold water like a dish. In a dry summer, the plough turns it up in great clods, scarcely to be broken or separated by the heaviest roller. It requires, therefore, much labor to put it in a state fit for producing either corn or grass: and though it will yield great crops, yet being cultivated at a heavy expense, unless when occupied by a judicious attentive farmer, it is seldom that much profit is obtained. The very superior management of clay soils, as practised in the Lothians, is fortunately an exception to this general rule.

The value of a clayey soil, depends materially on its having an open subsoil, which renders it more tractable and productive. Its texture is improved by a suitable mixture of common sand, sea-sand and above all, of limestone gravel, where it can be obtained. Peat moss also, that has for some time been dug up, and exposed to the action of the atmosphere, may be used with advantage It is likewise necessary to enrich it with putrid and calcareous manures in the course of its cultivation.

Under proper culture, clay soils are well calculated for growing crops of beans, wheat, oats, clover, and winter tares; but not for barley, unless immediately after a fallow; nor for turnips, or potatoes, unless under very peculiar management. Clays become good meadow, though from their aptitude to be poached, they are, in general, unfit to be fed by heavy cattle in wet weather; but they do well for hay, or soiling. The after grass may be used to feed neat cattle till October, and sheep till March. A stiff clay, however, with a strong marl under it, is preferred in Cheshire and Derbyshire for the dairy.

Ploughing previons to winter's setting in, is of great use to clays, by exposing the surface to the frost, which mellows and reduces it in a manner infinitely superior to what could be accomplished by all the operations of man. In this state, the soil remains till spring seed-time, when it is either ploughed with a shallow furrow or scarified and sown.

In respect to fallowing strong clay, a (subject to be afterwards more fully discussed) though some eminent farmers think it unnecessary, provided particular attention be paid to the bean crop, sowing early, horse hoeing regularly, and weeding completely; yet there certainly are many clay soils, more especially in Scotland, so tenacious and obdurate, so adhesive to every thing that comes in contact with them when wet, and assuming, when dry, such a stony hardness, that they are but ill calculated, in that stubborn state, for the purposes of vegetation. In that case, a summer fallow is indispensably necessary every six or eight years; both to prevent such soils contracting a most injurious sourness and adhesion from wet ploughing, and in order that, by exposure to the sun and winds, during the summer months, they may be so thoroughly pulverized, as to be placed in a state fit for bearing abundant crops of grain and grass. There are certain soils, and situations, indeed, *where summer fallowing cannot be advantageously relinquished for any other process of tillage whatsoever.*

4. *Peat.*—This substance is unquestionably of vegetable origin. The difference between it and vegetable mould is this, that mould is derived from finer substances, as the leaves of the trees,—the remains of arable cultivation,—and the roots as well as the leaves and stalks of the finer grasses, which contain a large proportion of earthy matters; whereas peat is chiefly composed of various sorts of aquatics; which, instead of rotting on, or near the surface, are generally immersed in stagnant water, and only partially decomposed. In valleys, peat moss has often a considerable proportion of vegetable earth washed from the higher grounds.

(To be continued.)

From the Northampton Courier.

Extract of a Letter from a Gentleman in Indiana, under date of Dec. 7, 1837.

Sir—Having purchased last spring with a friend, two papers of Mulberry seed of Mr D. S. Porter of Cincinnati, from which we had about 300 fine trees, many of which attained last season the height of 5 to 6 1-2 feet, and had leaves about 7 1-2 by 5 1-2 inches and under, and also had nearly as many trees from seed obtained of Mr Whitmarsh, sown at the same time, and no material difference; perhaps the leaves of the latter

are a little smoother than the former; one of the trees attained to the height of six feet or more.

My friend before mentioned, set out last spring the roots or stumps of 300 trees, the product of seed purchased of Mr Whitmarsh, the year before. These roots have thrown up an average of 5 to 6 thrifty shoots each, and have a very heavy weight of foliage. The leaves from one of these weighed one pound 3 ounces, and I think they averaged 3-4 or more. From a comparison of these trees with a fine lot of genuine multicaulis growing in a neighboring field, I think they yielded on an average an equal weight of foliage with the multicaulis. Their leaves, as to size, were about midway between the Italian and multicaulis, but much heavier than the latter in proportion to the size, growing close together upon the stalks.

I wish to engage in the culture of rearing silk, and consider it a matter of the first importance to have the *best kind of mulberry trees*. This is therefore my apology for troubling you with the following enquiries in relation to the trees produced from the seed purchased of Mr D. S. Porter, which he informed me you had procured in China.

1st. Are they of the same species referred to in your letter addressed to the Hon. A. T. Judson, which you denominated Canton Morus multicaulis, that those who have tried the experiments, have found that a leaf of the Canton of the same size weighs double to that of the Manilla multicaulis.

2d. Are they the same kind referred to in an article from the Northampton Courier, published in the October number of the Silk Culturist—"that the difference between cocoons fed exclusively on the white mulberry, and those fed wholly on the Canton mulberry, was very apparent to the naked eye, the latter being of a more brilliant than the former?"

3d. Do you consider them on the whole as valuable for feeding worms as any other species, especially the genuine multicaulis, produced from cuttings or layers?

4th. Is the silk produced by the worms fed from the foliage of these trees of as good quality as from any other?

5th. I have heard it asserted, that the glossy surface of leaves causes the worms to reject them. Does your experience in feeding worms from these trees corroborate this assertion?

6th. Are these trees probably of the same species with those produced from the seed imported by Mr Whitmarsh?

7th. What is their value in market compared with the genuine multicaulis?

Please reply to this immediately, if convenient, and *if you are willing*, through the columns of the Silk Culturist or the Northampton Courier; if you reply through the latter, please send me one or two copies of the number containing your reply, and oblige your obt. servant,

M. E. EDWARDS, Jr.

Dr Daniel Stebbins,
Northampton, Mass.

REPLY.

Mr Charles J. Hosman, going West, took with him several papers of Mulberry seed, which to distinguish from others, I called the Asiatic. Although labelled Canton, the seed did not come to me from the missionaries. Mr Hosman wrote me he had left some of the seed with Mr D. S. Porter, of Cincinnati, and is probably the same seed about which you make the foregoing enquiries.—In reply to your 1st and 2d question, the trees from the seed referred to are not the Canton multicaulis mentioned in my letter to the Committee of Congress, nor are they the mulberry mentioned in your second enquiry, but are known by the name of Asiatic, to distinguish them from other seedlings, as the Chinese, so called, sold by Mr Whitmarsh in 1836, and the Multicaulis seed sold in 1837; also, from the Broosa and Smyrna; all of these have a great similarity in the *shape* of the leaf, and may prove a great acquisition to the mulberry feed.

But as you inquire particularly in your third question about the trees you have from the Asiatic seed—the leaves, although of less size than the Manilla multicaulis, yet they are more thickly set upon the stalk; each tree will probably furnish as much foliage of as good quality as the Multicaulis, and be found more hardy.

4th. I have no evidence of worms having been fed wholly on these leaves (the Asiatic.) I used them, however, for trial, and found the worms as fond of them as of the Manilla multicaulis, and have no doubt of its furnishing as good silk.

5th. I have had no personal experience in feeding worms with foliage having a glossy surface, except between the Black and Red mulberry, one of which is smoother than the other, and the worms did not like it so well. But an experienced gentleman who has tried such as you describe, confirms what you have heard. The leaves he referred to, however, were not only very smooth and glossy, but very thick like an oak leaf. In reply to your

6th question, I would not undertake to say your trees are of the same species, yet the foliage is very similar to those of the roots which your friend set out last spring, and will, I trust, prove a very hardy tree, as has been well attested the first year, —unscathed by our early severe frosts. As to every *good quality* in the mulberry, I consider the Canton standing *first* on the scale; and if any reliance can be placed on the first year's development of quality, I think the Asiatic will be nothing less than the *second*, unless the product of seed just received from the Chinese mission shall prove equal to the Canton, which I imported in 1834, from the same source. The last supply I had requested to be gathered in the high districts of China. There is some mistake in relation to the seed you had which ought to be corrected. Not having been forwarded by the mission, but through another channel, I therefore called it the Asiatic. The seed I have recently received and tested, I consider the real *Canton*, and hope it may prove so. Great pains have been taken to procure it, and I should regret a disappointment. I can tell you more about it next autumn.

7th. Respecting the market value of the trees, (Asiatic) how much they may improve another year, I know not; but from the developement of this the first year, it promises to be worth *as much* as the multicaulis. My seed was sown *very late* and *very thick*, therefore excluded in part from the benefit of sun and air, they could not, nor do I think they ever can attain here, such height as in your favored climate. A few trees, however, sown earlier in a shady part of my garden under the fence, without being soaked, did not come up until the expiration of eight long weeks. Yet from this forlorn hope, some leaves have attained the size of 5 1-2 by 4 1-2, and none of the trees were over 2 to 2 1-2 feet.

THE CULTIVATION OF SUGAR BEETS IN OHIO.—When the maple forests bow to the axe of the woodman, as they must in the tide of emigration flooding the west, Ohio must look to the Beet if she wishes a domestic substitute for sugar, and cannot get return cargoes of the article cheap enough for the produce she ships to Louisiana. A Mr Pugh, according to the Cincinnati Gazette, has already anticipated this culture on his farm, a few miles north of that city. He had raised this year, sugar beets 30 inches in circumference, and weighing twenty pounds, from seed procured in France, and mangel wurtzel of nearly the same dimensions, also from French seed. Mr Pugh thinks it as easy to raise fifty tons of these beets from an acre, as fifty bushels of corn. They are capital for cattle and stock hogs, and young sucking calves prefer them to milk when properly prepared with milk. Among the 56 head of his Durham breeds, those that had fed on beets could readily be distinguished by their fat and sleek appearance. The beets are infinitely better when boiled.

The apparatus and fixtures used by Mr Pugh, for boiling, or rather steaming food for 300, and 40 or 50 cows with other stock, cost about $150, and consumes a quarter of a cord of wood per day.

Among the Durham cattle on the farm of Mr Pugh, was observed some very fine young males, and among them Lebanon, an animal of superior growth and figure.

Mr P. has not attempted to make sugar from his beets, but if its manufacture is profitable anywhere from this article, it would certainly be so here, for no soil can produce a better growth.—Two hands can prepare the ground, plant and cultivate five acres of beets in a season, and the product would doubtless yield many tons of saccharine matter.—*N. Y. Star.*

The New York Commercial Advertiser says—"The number of hogs slaughtered last season, in the valleys of the Ohio and Mississippi, amounted, according to Lynford's Western Address Directory, to five hundred thousand! averaging two hundred pounds each hog, the total amount being *one hundred millions of pounds!* which was in the market. The cost of the article varied. Up the Missouri river, the minimum price was $3,50; in other parts of Missouri State, $5 per hundred pounds. In Illinois and Indiana, the prices varied from $4,50 to $6; and in Ohio, and along the Ohio river, eastwardly from Cincinnati, the average price was $7 per hundred pounds; total average cost about $6,000,000 for pork and bacon, for sale in the western markets."

A drop of the spirits of turpenting put into the mouth of a chicken, from the point of a feather, or otherwise, will cure the gapes; and by mixing salt with their food will prevent their taking the gapes.

Glauber's Salts, Sulphate of Soda, an ounce dissolved in about one quart of water, and sprinkled on vines, is recommended as a preventive against insects.

(For the New England Farmer.)

ON THE PRESERVATION OF MEAT BY SALT.

The antisceptic power of salt must appear to be the most fortunate of that substance when we consider how great a relish mankind have had for it in all ages of the world. Much better for us would it be to be deprived of all that remains of the tribe of condiments than this one. It should however be observed that salt is only an antisceptic in large quantities, and that a small quantity, so far from preventing, promotes putrefaction.—From this fact, it was concluded by Sir John Pringle, that as we use salt at table in small quantity only its use is to help digestion by its sceptic power, the meat being thus softened and dissolved.

The kind of this article most preferred in curing meat and first is the Bay salt which is obtained by spontaneous evaporation of sea-water. Meat salters prefer that which is coarse grained or occurring in large crystals, and evidently of impure quality; and perhaps this very impurity adds to its antisceptic power. Different kinds of salt differ in their degree of saltness. The coarse-grained salt possesses a greater degree of poignancy than the fine-grained, although the latter penetrates meat much sooner than the former.

In order to salt meat for long keeping it ought to be in the first place, of the best possible quality; for as the natural effect of the process is to deteriorate the meat, unless it was originally excellent a sufficiently good quality to render it agreeable will not remain. The main object to be kept in view ought to be to extract as much of the animal moisture as possible, with the least possible quantity of salt, and therefore with the least injury to the softness of the fibre. To effect this object with beef, select the meat perfectly free from taint; let all the kernels be cut out; sprinkle it all over with fine salt; lay it on an inclined plane for about six hours, so that its juices, which the salt will separate and dissolve in, may, as much as possible, drain off. Let it be then wiped, well rubbed with Bay salt, and placed between two strong boards, with a heavy weight on the upper one. The combined action of the salt and pressure will cause the extrusion of the juices.—In twenty-four hours, let the meat be wiped and rubbed again, and laid between the pressing boards. The same wiping, salting, and pressing, are to be repeated in twenty-four hours more. In this way, the weights being added to every day, the meat may be kept until it is salt enough for the purpose. The time will be shorter or longer according to the fancy of the consumer; but if the meat is to be kept for store, it must not be left exposed to the air between the boards more than a few days. After being removed from the pressing boards, the pieces must be packed closely in a perfectly tight cask, with salt between and around. Instead of using salt alone, it may be mixed with one eighth of its weight of saltpetre to redden the meat.

In the *Journal des Connoissances Usuelles*, the following mode of making mutton hams is given, and it perhaps might be followed with advantage as a general process for preserving meat:—The mutton must be fat. Two ounces of sugar are to be mixed with one ounce of common salt, and half a spoonful of saltpetre. The meat is to be rubbed with this, and then placed in a tureen. It must be beaten and turned twice a day, during three consecutive days; and the scum which comes from the meat having been taken off it is to be wiped and again rubbed with the mixture of sugar, salt, and saltpetre, in the same proportions as before. The next day it should be again beaten and the two operations ought to be repeated alternately during ten days, care being taken to turn the meat each time. It must be exposed to smoke ten days. Hams thus prepared are generally eaten cold. There can be little doubt that this mode of preserving, if applied generally, would be found an excellent one; and it will be readily admitted that any process which preserves meat with so small a quantity of salt is valuable. It should always be kept in mind, that the true art of pressing meat by salting, is to do so with the smallest quantity of salt than can be made to answer the purpose.

It is a common opinion that salting greatly impairs the nutritiousness of meat, and, in proof, the fact is adduced, that all the juices of the flesh run out and form brine. It is believed that the nutritive qualities are scarcely impaired by a few days' salting, notwithstanding the great quantity of gravy-like juices which pour out. But there can be but little doubt that the action of long-continued salt is to corrugate and harden the fibre, to render it somewhat less easily digestible, and probably only lessens its nutritiveness in a small degree, for the liquid consists merely of water tinged with blood; and one use of the process is to expel from the meat this blood and water, which, if allowed to remain, would tend to promote its putrefaction.

When meat has been too long kept in salt the taste becomes disagreeably saline, and resource is had to the expedient of exposing the meat to the action of water. In the way that this is generally done, the process is totally inefficient for the salt is retained with great obstinacy, probably by chemical combination in a slight degree, and the external portions of the meat defend the internal parts from the action of the water; and if the watering were renewed often enough to remove any salt from the central portions, the result would be, that the external parts must have been totally deprived of salt, which never happens.

All meats are not rendered equally salt or hard by exposure to the action of salt during the same time. Pork becomes much less salt than beef, and with that smaller portion it keeps as well, the principal reason of which is, that it does not take up salt so speedily as other meats on account of having a greater ratio of fat to lean, the fat taking up salt much more slowly than the muscular parts of the animal.

It is a curious fact, and one that it is useful to be acquainted with, that the saltness of meat which has been preserved in brine, will increase, even after the meat has been removed from the brine. Thus, if, in winter, a large piece of fresh beef be cut into two equal parts and both are immersed during the same length of time in the same brine, containing more salt than the water can hold dissolved, suppose for fourteen days, one of them, when dressed, will prove sufficiently salt to please many palates. Let the other be taken out of the brine at the same time, and set aside for six weeks, and it will be found on being duly boiled that it has grown by far more salt than the former, although apparently they were both exposed to the action of the salt during the same length of time.

Many persons fail in preserving meat by using too little salt, the error arising from the vague notions which prevail in regard to the nature of the brine. In many books, we find it given as quite a sufficient direction for the strength of brine, that it shall float an egg. According to Gay Lussac eggs are pretty, nearly all of the same specific gravity, which he found to be about 1,078. Now a saturated solution of salt bears an egg, and a saturated solution, diluted with almost double its bulk of water, will do the same; hence the floating of an egg is a very vague test of strength. To obtain brine that will be of the same specific gravity as an average egg, a saturated solution of salt, at 65° F., is to be mixed with double its measure of common water at the same temperature. An egg put into this mixture will remain at the top, bottom, or middle; and the specific gravity of the mixture at 60° is 1,078. Brine should never be weaker than a saturated solution; and it will be always advisable that there shall be some undissolved salt present; for as meat is continually giving out juices, up to a certain period, these juices would lower the strength of the brine below the preserving point. But if there be an excess of salt present it will dissolve in the juices given out and thus the strength of the brine will be kept up.

It is because salt is the most agreeable preservation of meat that it is used for this purpose, and by no means because it is the most effectual. According to the experiments of Sir John Pringle, it is the most feeble of all the substances tried by him. Saltpetre he found to possess no less than four times the preservative power of common salt. On this account, and on account of the property which saltpetre possesses of giving a pleasing redness to beef, it is used as an ingredient in the brine with which meat is preserved. Some suppose, however, that it has also the effect of hardening the fibre. Among other substances which he tried he found that sulphate of potash possessed twice the preservative powers of common salt—Sal Ammoniac three times—carbonate of ammonia four times—carbonate of potash (pearl-ash) four times—borax twelve times—succinic acid twenty times—alum (sulphate of alumina) thirty times—chamomile flowers one hundred and twenty times—and camphor three hundred times the power of common salt.

Mr Babcock an ingenious artizan from Ware, is exhibiting his beautiful little Circular Railway at the Town Hall. The Steam Engine leads off a train of Cars, with baggage and passengers. At a given signal, they stop, a door opens and a man appears. He takes in the trunks, retires into the Car, the bell rings, and the train is again in motion. An engine is also put upon the track, which operates by machinery within itself and which is capable of regulating its own motions. He has also various little specimens of ingenuity, the product of his own skill, with some novel musical instruments, all which go to make up a pretty and instructive exhibition.—*Northampton Courier.*

A man boasting in a company of ladies, that he had a very luxuriant head of hair, one of the damsels remarked that it was owing entirely to the MELLOWNESS of the soil.

Try to spend your time usefully both to yourself and others.

BEET ROOT SUGAR.

The subjoined, translated from the Journal des Debats, will be read with interest by those of our citizens who have, of late, been devoting their attention to the culture of the Beet, and the manufacture of the Beet Root Sugar.—*Nat. Gaz.*

We propose, in our turn, to lay before the reader the authentic and fullest accounts, which we promised, relative to the important discovery made in the Grand Duchy of Baden, for the desiccation of the Beet.

Until now, the Sugar establishments have wanted the fresh Beets, which, when collected in October, begin to ferment and decompose towards the month of February. At the close of March or April, the manufacturers are obliged to suspend their work until the next crop; so that there remain only four or five months in the year for the full manufacture. Notwithstanding the most patient investigations, it has, hitherto, been found impossible, without injury to the beet, to obtain a desiccation that would allow its preservation thro'out the year, and to work without interruption. Indeed we believe the solution of this problem had been almost abandoned as hopeless.

A German, M. Schuzenbach, who appears to be endowed with a high degree of inventive genius, has discovered a process, by which to obtain this desiccation in large quantities of the beet.—Besides the uninterrupted work which hence becomes possible, assurances are given of other advantages not less important. The beet, when dried, occupies only one fifth the space it does when fresh, and the saccharine matter is in a state of double concentration. A hundred quintals of beets, undergoing this preparation, give, in the final result, about ten quintals of a drained and dry sugar.

This discovery is no longer to be viewed as a mere theory. A society, formed in the Grand Duchy of Baden, with a capital of a million of florins (more than two millions of francs) and sustained by all the credit of the powerful house of De Haber, has established a factory at Ellinguen, where the process has been tried on a large scale for several months. The experiments have been followed up by two commissions composed of scientific men and manufacturers, one from Bavaria, the other from Wurtemberg. After six weeks labor in the manufacture, the two bodies declared as certain, the advantages announced. A particular circumstance permitted us to be present during the first experiments. The immediate desiccation of the beet, (a fact which M. Demarcay in the session to day declared impossible) is done with a rapidity and ease truly wonderful.

The protection extended to national industry by the paternal government of Baden, is well known. It accordingly favors with all its support this new undertaking. There is now being organized in Wurtemburg, a second society altogether as strong, for carrying into operation the process of M. Schuzenbach, and the two companies, it is said, have united in a sort of private contract, the first idea of which, was borrowed, perhaps, from the system of the Prussian Custom Houses. New associations in Prussia and Bavaria are also, according to accounts worthy of credit, on the eve of adopting the new invention; and of acceding to the plan of association. We think we can, also, assure our readers, that a patent is asked of France; and that several of our principal manufacturers are already in the way of an arrangement with the proprietor of this method.

It is impossible yet, well to rate the bearing and influence of this revolution in the manufacture.—But it appears demonstrated, that it will, at least, have the effect of rendering the business definitively commercial; while it is true that the present processes tend to render it agricultural. Considering the powerful machinery which the new method requires, the system in laying in the stock, (which is henceforward possible) and the regular continuance of the manufacture, we are led to the opinion that it will be a business reserved only for large capitals.

THE WHEAT CROP FOR 1835-6-7.

Statements of flour left at Albany, Troy and Schenectady, from 1st September to the close of navigation in the year 1835—36—'7—

1835.	1836.	1837.
590,213	457,040	728,839 bls.

The wheat coming to Albany and Troy is included in the above estimate at the rate of five bushels for a barrel of flour.

The above statement shows the quantity of flour arriving at tide water, from the first of September, when the new crop commences coming to market, to the close of navigation, in each of the last three years. The quantity coming to tide water for this period in 1837, is greater by 138,626 barrels than for the same period in 1835,—and it exceeds the quantity coming to market in the fall of 1836 by 181,790 barrels. The average price of flour during the navigation season in 1835 was $6 50—in 1836 $9, and in 1837 it has probably been about $9 per barrel. At these prices, the quantity brought to market after harvest and during the continuance of canal navigation, in each of the years before referred to, will yield to the flour merchants the following sums, viz:

1835—500,213	barrels at	$6 50—	$3,836,384
1836—557,010	" at	9 00—	$5,413,360
1837—728,830	" at	9 00—	$6,559,551

The crop of 1836, that is, the wheat and flour coming to market from the first of Sept. 1836, to the 21st of Aug. 1837, is less by 384,000 barrels of flour, than the product of the previous crop of 1835. But with an importation from foreign countries of several millions of bushels of wheat and other grains, and with an abundant crop of wheat and all the coarser grains, as well as of every description of vegetable food, and with nearly 730,000 barrels of flour already in market from the wheat crop of 1837, can the present high prices be maintained? Since 1814 the price of flour has nearly doubled. Can those who are interested in the flour trade explain the cause of this enormous increase?

Poisonous Candles.—The attention of the Westminster Medical Society, at their last and at a previous sitting, was directed to a subject materially affecting the public health—that of white arsenic having been detected to a considerable extent in some candles lately come much into use. It appears that these candles, which are very much in appearance like wax, owe their beauty and brilliancy in burning to arsenic, which fact has been proved by experiments made by Mr Everett, the lecturer on chemistry at the Middlesex hospital, and Mr Phillips, of St. Thomas's hospital.—Dr Scott also stated that two manufacturers of these new German wax lights had acknowledged to him that the quantity used was one part of white arsenic to twenty-seven parts of fatty matter. Considerable discussion ensued in the society, as to the effect of such a quantity of a deleterious substance like arsenic being consumed in this way in houses or crowded churches—in some of which they had been lately introduced, as also in theatres. From the known ill effects of this mineral on those persons who are in the habit of using it in various manufactories, as well as the wretched breath and short lives of miners in Saxony and other parts from which it is procured, in combination with other substances, most of the members were led to consider that its effects would be exceedingly injurious to health, and that it was right the public should be made acquainted with the fact. One or two members stated that they had used the candles for some time, without experiencing any ill effects, while others, of a weaker habit of body had found them injurious. The candle may be known to contain white arsenic, if, on blowing it out, the wick smells like garlic; a fact indicating the presence of metallic arsenic, in which state a small portion only of the mineral is—the great proportion being white arsenic—the most deadly form of the poison. The lights in question are sold cheap, and in many instances a fraud is practised on the public, by the substitution of them for true wax lights; the fraud may be detected by the test we have mentioned.—[*Standard.*

Silk.—The culture of the Mulberry and the production of silk, are now known to be well adapted to the soil and climate of this State. The care of the silk worm is also suited to the other employments of the mass of our population, and the manufacture of the article will add greatly to our wealth. The Legislature endeavored to promote it, by the act of 1832, authorising the establishment of one silk company in each county.—But the means adopted, seem not to have produced the desired result. A company has been chartered in each of the counties of Beaver, Chester, Cumberland, Lancaster, Lebanon, and Philadelphia, but without much apparent success. Nor is it perhaps desirable that they should succeed. The silk business will undoubtedly become of first rate importance among us, and will probably be the sooner fairly established if left to the unrestrained exercise of private enterprize, properly encouraged by the Legislature. With this view, I would recommend that a small premium be offered by the State, for a limited time, on specified quantities of the article, when the production of our own soil and industry.—*Message of Gov. Ritner, of Pa.*

A curiosity has been sent to our office by Col. George Ferree, of Marietta, which we deem highly deserving of notice. It is an ear of corn complete and entire, and solid at the stem or root, but at about an inch above the root, branching out into seven distinct, separate, and perfectly formed ears of various sizes—a large, full and very handsome one in the centre, and surrounded by six smaller ones of different lengths and bulk, and equally well formed as the large one. It seems like a stout and hardy parent, with her six little ones clustering around her and craving nourishment and protection.—*Columbia Spy.*

NEW ENGLAND FARMER,
AND GARDENER'S JOURNAL.

BOSTON, WEDNESDAY, JAN. 2

INDIAN WHEAT.

This is the name applied to a grain, which recently has been brought into notice by its extraordinary prolificness, and of which as inquiries are constantly made of us, we propose to give what information we possess.

The plant referred to is, without question, the Tartarian Buck Wheat; or as it is called by others, the Siberian Buckwheat. It belongs to the tribe of the *Polygonum* from its many sides; and its name Buck Wheat is supposed to be a corruption of Beech Wheat from the resemblance of its seeds to the Beech Mast. The cultivation of this particular kind of Buck Wheat is not new in this country nor in this state. The recent excitement in regard to it seems to have been accidental; its value perhaps being more particularly brought into view by the failure of common Wheat through the grain worm and by rust; and the loss of the Indian Corn by the inclemency of the seasons. This particular kind has been several years cultivated in Pennsylvania; and a beautiful sample of it was brought to us from the north-western parts of that state three years since; but without any name by which to designate it, or any account of its cultivation or its yield. It has been likewise for several years cultivated successfully in Hampshire County in this State. It was said to have been introduced into Germany a century ago; and within a few years has been cultivated in Great Britain. It is supposed to possess considerable advantages over the kind that has been usually cultivated, not only because it is considerably heavier in the grain, but is generally considered more palatable. It is said to do well even in the poorest soils; is not affected by cold; and being more disposed to branch out and spread its stalks, requires not so much seed for its cultivation as the common kind of buckwheat. Some persons, who have cultivated it demur to the fact of its being more productive; and complain of its flour as being blackish and rather bitter. These differences can only be reconciled by supposing differences in the modes of cultivation; in the nature of the soils, upon which it grows; in the kind of manure employed; in the manner of its being cured; and in the manufacture of the bread itself.

With a view to give the best information we have been able to obtain of its cultivation and history here, we subjoin some extracts from letters received in answer to our inquiries

"Of its origin, says one of our correspondents, I know nothing;, but report says some years since a traveller fed his horse at a public House in a town a few miles north of us (Hartland, Vt.) and that after he left, a few grains were found in the trough in some respects resembling buckwheat; and that these being sown produced the grain now known by the name of Indian Wheat It produced 30 or 40 bushels to the acre on ordinary land, such as will not bear a good crop of any other grain; and sometimes yields 75 to 100 bushels to the acre."

"Our farmers differ much as to the quantity of seed that should be sown. Some put on a bushel, some not more than eight quarts. I should say from 16 to 25 qts. It may be sown any time till July. It requires from 2 to 3 months to come to maturity; if sown too early it will be in danger from late frosts. About the middle of June is the usual time of sowing here."

"The land should not be too rich. On common land without manure it succeeds well. Poor sandy land that is not worth cultivating in any other grain produces a fair crop The ground should be prepared as for rye or oats. If the land be poor it should be left as smooth as possible that the grain may be cradled low; as it generally branches out near the ground especially when sowed thinly or on poor land. The average weight is 48 to 50 lbs. per bushel. It is used for various kinds of bread stuff; also for feeding hogs, horses, cows, &c. When floured as it should be it makes good bread if eaten when new, whether warm or cold. It will mix well with rye and Indian meal for coarse bread. It is thought by some to be equal to corn for fattening hogs, bushel for bushel, but I think this is a mistake. I have known no experiments to test its value. It is fed to horses by some persons, but probably oats by weight are preferable. On the whole I think it a very valuable kind of grain, especially in places where the land is naturally poor or has become exhausted by long continued cultivation."

We have another letter before us, which states; "I suppose the right name of this grain to be Indian Wheat. It has been cultivated a number of years in Vermont, and in some parts of New York; but where it originally came from I cannot tell. I broke up last year about 2 1-8 acres of a piece of pasture land; sowed one bushel and two quarts, and obtained one hundred bushels, which was the greatest yield I have heard of. It has been raised on almost all kinds of land. I sowed it last year on the 10th of June. I think it should be gathered when three fourths of the grain are ripe. It will produce from 20 to 25 lbs. of flour per bushel. It is used as an article of food considerably in these times of scarcity, and is much used for fattening swine."

Such are the accounts we have received of the cultivation of this article of produce, which is comparatively new among us. We have been informed on authority on which we rely that it has this year yielded 75 bushels to the acre; but the circumstances under which this product has been obtained, have not come to our knowledge. It would be wrong to calculate upon any such amount as usual or probable. That which we have tested weighed 49 lbs. to the bushel. A farmer with whom we are acquainted, who has used it in his family, has obtained 35 lbs. of flour to a bushel of grain. A grain weighing this much, and yielding in a poor soil, without manure, even 25 or 30 bushels to the acre must be pronounced a valuable acquisition. It is advised by some farmers to use it for horses; but one writer says, he has known it to produce a stupefying effect. Young says a bushel goes farther than two bushels of oats. In fattening swine it is said that eight bushels of buckwheat will go as far as twelve bushels of barley meal. We give these statements entirely upon the authority of others, having had very partial experience in the use of it for feeding. Buckwheat cakes, which are almost a standing dish in Pennsylvania and Maryland, when well made, and eaten warm, are much esteemed by most people; are deemed nutritious; and have the advantage of not turning acid upon the stomach.

The plant is cultivated in many places extensively for its advantages in feeding Bees; its blossoms containing a large quantity of honey and remaining a long time open, different plants in the same field, and different parts of the same plant opening in flower at different times. One writer says "the *haulm* of Buckwheat is more valuable than clover if cut while in flower." It is of little value as food for animals after the seed has ripened.

One person says he has seen hogs after having eaten heartily of it become so inebriated as to be unable to walk without reeling. How far the use of it for swine would under such circumstances compromit those good men, who have signed the temperance pledge, is a nice question in casuistry, which we shall leave to them to decide. Perhaps they will construe their obligations in this matter as applying to the furnishing the means of intoxication only to human swine.

On its value as a green dressing and for the purpose of ploughing under; and as a protection of the young wheat, we shall have something to add at a future and more convenient season.

SUMMARY OF THE WEEK.

What are Congress doing? What are the Legislature doing? Talking—Talking. Strange it is that the human tongue should endure such perpetual motion; and that a road so much travelled, and travelled too by vehicles oftentimes of such a rough and jagged construction, words of all lengths, all syllables and all languages should not become gullied or rutted, or sloughed. No Macadamized road that human skill ever formed wears like it Now there is a good deal of talking to some purpose, and there is a good deal to no purpose, but that of the suffering of those, who are compelled to listen to it. We verily believe that if a faithful reporter could be found who would present a perfect *fac simile* of many of the public speeches that are thrown off at a single heat with all their nothingisms and repetitions; and their "I did not mean to speak, Mr Speaker, and I will detain the house but one minute Mr Speaker," and so on, and show up the orator as he shows himself up, we verily believe many of our public debaters would be themselves astonished, not that they so often move the house; but that with such speeches they should not move them at once right out of doors; which we apprehend they would do if they were not paid two dollars and eight dollars a day for taking lessons in patience and endurance.

THE LEGISLATURE.—The Legislature is engaged busily in looking into the condition of the Banks; and in seeking to devise some remedy for evils, which disturb and distress every man in the community. There have been other deaths since we presented our last obituary, but we believe there have been no interments; the doctors being engaged in an anatomical examination of the bodies The alarm seems almost as general as at the time of the great Plague in London, and some, whose health, we believe, was "pretty well I thank you," have asked leave to die a natural death for fear of a public execution. We shall venture no farther on particulars until the anatomical report is published.

The Legislature have determined upon their own compensation; and our *hired men* for the present at least agree to the old price and will work for two dollars a day and find themselves. Now this is all fair and above board, and as most of the work is "in doors" and comes at a season when the plough cannot run, we hope all parties will be satisfied.

A Wheat party is getting up and promises to be high in favor, who are disposed to try if Massahusetts cannot raise her own bread. Our grown-up daughter in Maine has set us a fine example.

CONGRESS.—Congress are reposing on their arms.—They have voted a million of dollars for the prosecution of the war in Florida, because the Secretary of War has spent his last copper. These Indians cost us a great deal of trouble and money. They are only fit to live with the buffaloes among the mountains upon roasted dogs and chicken pies made of the Eagles' young.—Strange when we asked them to do it, they would not at once cheerfully give up their lands and farms and houses and cattle and burying places without making all this trouble, especially as we are civilized, and of course have a right to every thing we can lay our hands upon, and they are uncivilized and have a right only to the forests and prairies until we want them.

The sub-treasury project is fast approaching discussion in Congress; and to this will probably succeed the discussion of the annexation of Texas to the Union—the difficulties with Mexico—and an adjustment of our affairs with Great Britain growing out of the non-settlement of our northeastern boundary line, and the disaffection in Upper Canada We design to keep the Farmers, who are as much interested as any class of men, informed very briefly of the state of public affairs; but we shall refer only to facts, and enter upon no party discussion.

THE FRONTIERS.—The war in Canada has been transferred from Navy Island to the neighborhood of Detroit,

troit, where the disaffected have attempted to establish themselves. They have suffered some losses by an attack from the loyalists on their encampment or rendezvous on one of the Islands in the Detroit River in the neighborhood of Malden. A schooner has been destroyed, several men killed, and 400 stands of arms captured.

FOREIGN. The only foreign news is the early convocation of the British Parliament, a fortnight before the appointed time, because of the Canadian troubles — Another plan has been laid to destroy the life of the French King. The more elevated the more exposed to danger. When the tall and haughty pine is riven by lightning because he pierced the charged thunder clouds with his top, the lowly shrubs may rejoice in their humility A good deal of concern is expressed in the foreign journals because the Duke of Nemours has broken his arm We are sorry for his misfortune, but it seems this Porcelain China may break as well as our common pottery.

TO CORRESPONDENTS.—We have a valuable communication on Nonantum Hill. It shall appear. "One good turn deserves another,"—now please send us more of the same kind.

We have unfortunately mislaid the account of the Farm School, so honorable to its Superintendent; but it shall be forthcoming.

We have some queries about Bone Manure, which we purpose soon to answer at large.

We shall tell in our next what we know of the Rohan Potato.

We have on our files an Essay on the Culture of fruits, by Pomona, and on the Culture of the Potato Onion, from the same intelligent source, both of which shall come in as soon as we can get room for them to sit down; and we must make our apologies for keeping them standing so long at the door.

We have inquiries about Live Hedges and Fences.—We have something about the Diseases of Swine. The former subject is in progress. For the last matter we ask a little indulgence. We do not understand that the poor souls are sick and need an immediate prescription; if so, we should send them the Matchless Sanative at once; but only that they *may be* sick, and we shall have our prescriptions, pill-boxes and phials ready against the sickly season.

We had prepared a full account of the Proceedings of the Trustees of the Massachusetts Agricultural Society, in the bestowment of their premiums. We have no doubt that the mouths of our farmers are watering to learn who have drawn the grand prizes. Lay the blame gentlemen, to the printer. He insists upon the old rule, "first come first served;" and says we have got too much company for our chairs. He promises that he will let us in next week.

We have some agreeable communications about the weather. Who has not felt its deliciousness. January has been a vernal month; and the winter seems to have dropt out of the Almanac. To-day and yesterday, however, some frowns have come over his brow, and his voice is a little harsh and petulant. Let us take it kindly, and thank the old fellow for his uninterrupted good humor during the month so far. Another such a season, and we shall think he is growing young again, and shall expect to see him tricked out in the wreaths and flowers of genile May.

BRIGHTON MARKET.—MONDAY, Jan. 29, 1838.

Reported for the New England Farmer.

At Market 380 Beef Cattle, and 1075 Sheep. 40 Beef Cattle unsold.

PRICES.—*Beef Cattle.*—No particular variation from last week. We quote to correspond, viz: Extra $7 00 a $7 25 --First quality at $6 50 a $7 00 —Second quality $5 75 a 6 25.—Third quality $4 50 a 5 50.

Sheep —We notice sales at $2 38, $2 62, $3 00, $3 50 $4 00, and $5 50.

Swine.—None at market.

Hale's Horse Power and Threshing Machine.

For sale at the New England Agricultural Warehouse and Seed Store: the above machines were highly recommended by the committees at the late fair, and by others who have used them for the last two or three years.

JOSEPH BRECK & CO.

THERMOMETRICAL.

Reported for the New England Farmer.

Range of the Thermometer at the Garden of the proprietors of the New England Farmer, Brighton, Mass. in a shaded Northerly exposure, week ending January 28.

JANUARY, 1838.	7 A. M.	12, M.	5, P.M.	Wind.
Monday, 22	14	22	20	N.
Tuesday, 23	8	25	26	E.
Wednesday, 24	25	40	36	S.
Thursday, 25	24	38	33	E.
Friday, 26	38	54	46	S. E
Saturday, 27	34	37	33	N. E.
Sunday, 28	31	40	34	S. W.

BONE MANURE.

The subscriber desires to inform his friends and the public that he has been in in the Bone business more than ten years and has spent much time and money to ascertain how bones may be converted to the best use, and is fully satisfied that they form the most powerful stimulant that can be applied to the earth as a manure. He offers for sale ground bone at a low price, and is ready to receive orders to any amount, which will be promptly attended to.

Orders may be left at my manufactory near Tremont road, in Roxbury, or at the New England Agricultural Warehouse and Seed Store, No. 52 North Market Street, Boston.

Jan. 31. NAHUM WARD.

SAGE AND SQUASH PEPPER SEED.

Cash and a liberal price will be paid for Sage and Squash Pepper Seed at the New England Agricultural Warehouse and Seed Store.

FRUIT TREES, ORNAMENTAL TREES, MORUS MULTICAULIS, &c.

For sale by the subscriber. The varieties, particularly of the Pears and the Plums were never before so fine, the assortment so complete. Also of Apples, Peaches, Cherries, Grape vines, a superior assortment of finest kinds, and of all other hardy fruits.

20,000 Morus Multicaulis or Chinese Mulberry trees can still be furnished at the customary prices, if applied for early, this being all that now remain unsold.

Ornamental Trees and Shrubs, Roses and Herbaceous plants, of the most beautiful hardy kinds. Splendid Peonies and Double Dahlias.

4,000 Cockspur Thorns, 10,000 Buckthorns for Hedges.

800 Lancashire Gooseberries, of various colors and fine kinds.

Harrison's Double Yellow Roses, new and hardy, color fine, it never fails to bloom profusely.

Trees packed in the most perfect manner for all distant places and shipped or sent from Boston to wherever ordered.

Transportation to the City without charge.

Address by mail post paid.

Catalogues will be sent gratis to all who apply.

WILLIAM KENRICK.

Nursery, Nonantum Hill, Newton, Jan. 24, 1838.

HOWARD'S PLOUGHS.

Constantly for sale at the New England Agricultural Warehouse It is hardly necessary to repeat that these ploughs are considered by our practical farmers to be the best ploughs now in use, and continue to stand No. 1 at the Brighton Fair.

Nov. 1, 1837. JOSEPH BRECK & CO.

WINNOWING MILL.

Just received at the New England Agricultural Warehouse and Seed Store, Nos. 51 & 52 North Market Street, Boston, Holmes's Winnowing Machine. This article was highly recommended by the committee at the late Fair.

Likewise Springer's Patent Winnowing Machine, a very neat and convenient mill.

JOSEPH BRECK & CO.

WANTED

A Farmer with a wife to take charge of a farm within 3 miles of Boston—an American—apply to E. FRANCIS, over Suffolk Bank.

Jan. 24, 1838.

CHINESE MULBERRY SEED.

We have just received a case of Chinese Mulberry Seed direct from Canton, that was saved by an experienced hand from the most approved varieties, which we offer for sale, *very low* by the ounce or pound. As the vitality of this seed has been tested by an experienced horticulturalist in this vicinity, we can recommend it with confidence to our customers. As a proof of its goodness we have at our office some of the plants in pots which have been raised this winter from the seed.

JOSEPH BRECK & CO.

PRICES OF COUNTRY PRODUCE

CORRECTED WITH GREAT CARE, WEEKLY

		FROM	TO
APPLES,	barrel	2 00	3 00
BEANS, white,	bushel	1 12	1 25
BEEF, mess,	barrel	14 50	15 00
No. 1,	"	12 50	13 00
prime,	"	10 00	
BEESWAX, (American)	pound	26	31
CHEESE, new milk,	"	8	9
FEATHERS, northern, geese,	"		
southern, geese,	"	40	45
FLAX, American,	"		9 12
FISH, Cod,	quintal	3 00	3 50
FLOUR, Genesee, cash	barrel	8 25	8 37
Baltimore, Howard street,	"	8 37	8 50
Baltimore, wharf,	"	8 25	
Alexandria,	"	8 25	
Rye,	"	6 00	
MEAL, Indian, in hogsheads,			
" " barrels,		4 87	5 00
GRAIN, Corn, northern yellow	bushel	87	
southern flat yellow	"	81	82
white,	"	77	80
Rye, northern,	"		1 10
Barley,	"		
Oats, northern, (prime)	"	52	55
HAY, best English, per ton of 2000 lbs		20 00	
Eastern screwed,	"	18 00	20 00
HONEY, Cuba	gallon	45	52
HOPS, 1st quality	pound	6	7
2d quality	"	4	5
LARD, Boston, 1st sort,	"	9	10
southern, 1st sort,	"	8	9
LEATHER, Philadelphia city tannage,	"	28	30
do country do.	"	24	25
Baltimore city do.	"	25	26
do. dry hide	"		
New York red, light,	"	20	21
Boston do. slaughter,	"	20	21
do. dry hide,	"	20	21
LIME, best sort,	cask	90	95
MACKEREL, No 1, new,	barrel	10 25	10 50
PLASTER PARIS, per ton of 2200 lbs.	cask		3 25
PORK, Mass. inspect. extra clear,	barrel	23 00	
clear from other States	"	21 50	22 50
Mess,	"	18 50	19 50
SEEDS, Herd's Grass,	bushel	2 75	3 00
Red Top,	"	87	1 00
Hemp,	"	2 50	2 75
Red Clover, northern,	pound	13	
Southern Clover,	"	12	13
TALLOW, tried,	lb.	12	13
TEAZLES, 1st sort,	pr. M.	3 00	3 50
WOOL, prime, or Saxony Fleeces,	pound	50	55
American, full blood, washed,	"	45	47
do. 3-4ths do.	"	41	43
do. 1-2 do.	"	38	40
do. 1-4 and common	"	33	38
Northern pulled. Pulled superfine,	"	42	45
No. 1.	"	37	40
No 2.	"	28	30
No 3.	"		

PROVISION MARKET.

RETAIL PRICES.

HAMS, northern,	pound	14	15
southern, and western,	"	13	14
PORK, whole hogs,	"	8	10
POULTRY,	"	12	14
BUTTER, (tub)	"	18	22
lump	"	22	25
EGGS,	dozen	25	28
POTATOES, new	bushel	37	40
CIDER,	barrel	3 00	3 25

AGRICULTURAL SURVEY.

The subscriber has taken an office over the American Stationers Company in School Street, where he may be found at the usual hours during the winter months; and where he will be happy to see his agricultural friends from any part of the State, and others who may favor him with a call.

HENRY COLMAN,
Commissioner for Agricultural Survey.

Dec. 27, 1837.

A TENANT WANTED.

A man of honest, industrious and temperate habits, with a small family and a thorough knowledge of farming, to take charge of a farm within an easy distance of a good market. Terms liberal, and the situation one of permanency if the reasonable expectation of the proprietor can be answered. For farther particulars inquire at this office, or of the proprietor,

LEVI S. BARTLETT.
Dec. 20, 1837. Postmaster, Kingston, N. H.

MISCELLANY.

From "Constance Latimer, or the Blind Girl,"

BY MRS EMBURY.

[Supposed to be sung by a blind girl, who refers all her ideas of the beauty of earth and sky to the sweet rural sounds she hears.]

Earth speaks in many voices: from the roar
Of the wild cataract, whose ceaseless din
Shakes the far forest and resounding shore,
To the meek rivulet which seems to win
Its modest way amid spring's pleasant bowers
Singing its quiet song to charm earth's painted flowers

Earth speaks in many voices: from the song
Of the free bird which soars to Heaven's high porch,
As if on joy's full tide it swept along,
To the low hum that wakens when the torch
Summons the insect myriads of the night
To sport their little hour and perish in its light.

Earth speaks in many voices: music breathes
In the sweet murmur of the summer breeze,
That plays amid the honeysuckle's wreaths,
Or swells its diapason 'mid the trees
When eye's cold shadow steals o'er lawn and lea,
And day's glad sounds give place to holier minstrelsy.

Earth speaks in many voices; and to me
Her every tone with melody is fraught;
Her harmony of tints I may not see,
But every breath awakes some pleasant thought;
While to mine ear such blissful sounds are given,
My spirit dwells in light, and dreams of yonder Heaven.

From the New York Evening Star.

DESTRUCTION OF THE MANDANS, AND OTHER TRIBES BY SMALL POX.

STUYVESANT INSTITUTE,
New York, Jan. 3, 1838.

DEAR SIR—Your note of the 2d inst. was duly received, and to your enquiry "whether the report of the melancholy fate of the Mandans be true," I am sorry to reply that the account you gave of them a few days since was literally correct.

Several letters have just been received from the Upper Missouri, written by gentlemen of unquestionable veracity (agents of the American Fur Company to their principals in this city, giving a most melancholy account of the ravages of the small pox among several of the Upper Missouri tribes of Indians. By the latest accounts from them, it seems that the disease was raging with the most desolating effects amongst the Assineboins, the Blackfeet, and other tribes in that vicinity. Several thousands had already been destroyed, and of the *interesting*, *friendly*, and *gentlemanly* Mandans, nothing remains but a few straggling individuals, who must, from necessity and the custom of the country, merge into the ranks of their surrounding enemies, where they will be used as slaves. So terminates the existence of Indian tribes, who, from want of numbers become unable to stand against the assaults of their enemies. Such is unquestionably the result to which the Mandan nation has arrived, and their *race* (with their interesting, *peculiar* customs—their religion and social happiness) may be said to be extinct. Poor *noble*, and *gallant* fellows! there are but few of the civilized world besides myself who know their virtues, and we alone well know how to extend our sympathies to them.

The Mandans, when I was in their country, lived all in two villages, in sight of each other, on the west bank of the Missouri, 1, 800 miles above St. Louis.—They formerly lived further down the river, and then, in eight or ten villages, the marks of which I saw, and closely examined, while descending the Missouri river. They had suffered immense losses from the hostilities of the Sioux during the last forty years, and their numbers and strength were very much reduced.

The American Fur Company, not many years since, erected a formidable fort by the side of their principal village on the bank of the river, and probably had been the means of preserving them thus far from the destroying hands of the Sioux, as their village and the plains about it were under the complete protection of the guns of the fort. They have fallen victims, however, to an enemy that was ruthless and irresistible, and it is probable that little else of them is left for the world's instruction, than the memorials which I made and collected of them whilst living with them.

I became more charmed with this tribe than I did with any other, and, consequently, took more pains to pourtray their customs and peculiarities of character. I have views of their villages, (as those will attest who have visited my rooms,) their lodges, their festivals, their games, their religious ceremonies, together with a great number of portraits of their principal men and women, and also a full collection of their costumes and other manufactures.

It is a source of great satisfaction to me (and should be so to the world also) that I was lucky enough to snatch such memorials of these unfortunate people from oblivion at the time that I did; and their melancholy fate is one more sudden fulfilment of the prophecies which I have been making to the world—that these noble fellows are soon to be swept, nation after nation, from the face of the earth. *

You ask me "how this disease was carried among them" I cannot tell. There is no doubt, however, that its germ was, in some way or other, communicated from the civilized borders; for, although the small pox has been the greatest destroyer of the Indian race, it is a fact that it never had its origin amongst them. Almost every tribe of Indians that now exist, or ever have existed east of these poor fellows, who are now taking their turn with it, and as far east as the Atlantic coast,* have successively suffered under the desolating ravages of this civilized scourge. But a few years since the Pawnees lost one half of their nation; the Puncahs lost two thirds; the Omahas and Otoes, Missourins and Kanzas lost one half at least of their numbers by it. Only one year and a half ago I was at Prairie du Chien, on the Upper Mississippi, where I witnessed its frightful effects amongst the Winnebagoes and Sioux—every other man amongst them was slain by it; and O-wa-pe-shaw, the greatest man of the Sioux, with half of his band, died under the corners of fences, in little (*horrid*) groups, to which kindred ties held them in ghastly death, with their bodies swollen and covered with pustules—their eyes blinded—hideously howling their death song in utter despair—affectionately clinging to each other's necks with one hand, and grasping bottles and tin pans of whiskey in the other! But let me stop. The actual ravages of this deadly disease (which, like other causes that have led to the rapid demolition of the numerous tribes of the West, and of which I shall give some more definite accounts ere long,) have heretofore been little known to the civilized world, and for the reason solely that these benighted people have had no proper vehicle of knowledge or information that could reach beyond the oral legends of their wigwam firesides---*they have had no newspapers.* Yours, &c.

GEORGE CATLIN.

* NOTE. Our readers will recollect the tradition among the Indians, spoken of by the Puritans on their first settlement of New England. These white emigrants were told that whole nations had been swept off before this country was visited, and the Puritans deemed it a providential circumstance.

CATALOGUE

of Forest Seeds and Trees, furnished by William Mann, Bangor, Me.

White Pine, Black spruce, Hemlock spruce, silver Fir, White Oak, Red Oak, White Birch, Yellow Birch, White Beech, Red Beech, White Maple, Red Flowering Maple, sugar Maple, Arbor Vitæ, American Larch, Hornbeam, White Ash, Black Ash, Mountain Ash, Elm, Basswood, Common Elder.

Customary prices are charged for boxes, carting, &c.

Orders may be addressed to WM MANN, Bangor, Maine, or to JOSEPH BRECK & Co. New England Agricultural Warehouse and Seed Store, 51 and 52 North Market Street.

Nov. 15, 1837.

FRUIT TREES, ORNAMENTAL TREES, MORUS MULTICAULIS, ETC.

For sale by the subscriber. The trees of the Plums and Pears were never before so fine, the assortment so complete.

Apples, Peaches, Cherries, Grape vines, a superior assortment of finest kinds, and of all other hardy fruits.

25,000 Morus Multicaulis, or true Chinese Mulberry trees at the customary wholesale or retail prices. The trees are thrifty, the form perfect, and the roots fine.

Ornamental Trees and Shrubs, Roses and Herbaceous plants, of the most beautiful hardy kinds. Splendid Pæonies and Double Dahlias.

Trees packed in the most perfect manner for all distant places and shipped or sent from Boston to wherever ordered.

Address by mail post paid.

Catalogues sent gratis to all who apply.

WILLIAM KENRICK.

Nursery, Nonantum Hill, Newton, Nov. 22. tJ.

PRUNING FRUIT AND FOREST TREES,

Grape Vines, and dressing Green house Plants, Shrubs, &c.

E. SAYERS begs leave to inform the citizens of Boston and its vicinity, that he will devote a part of his time to the above business this present season, and solicits the employment of those persons who may be pleased to engage him in the same. All orders left at the Agricultural Warehouse, No. 52 North Market Street, Boston, will be punctually attended to.

Dec. 27, 1837.

CLOVER SEED.

Just received at the New England Agricultural Warehouse and Seed Store, 10 tons prime NORTHERN CLOVER.

Nov. 1.

CORN SHELLERS.

Just received at the New England Agricultural Warehouse, Harrison's Patent Corn Sheller. This machine will shell 75 to 80 bushels of corn per day, and is one of the most perfect machines for the purpose ever introduced.

JOSEPH BRECK & CO.

Printed by Tuttle, Dennett & Chisholm,

17 SCHOOL STREET....BOSTON.

ORDERS FOR PRINTING RECEIVED BY THE PUBLISHERS.